LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



OFFICE OF FISHERIES INLAND FISHERIES SECTION

PART VI -C (ARCHIVES)

WATERBODY MANAGEMENT PLAN SERIES

CHICOT LAKE

AQUATIC VEGETATION TYPE MAPS AND NARRATIVES

AQUATIC VEGETATION TYPEMAPS

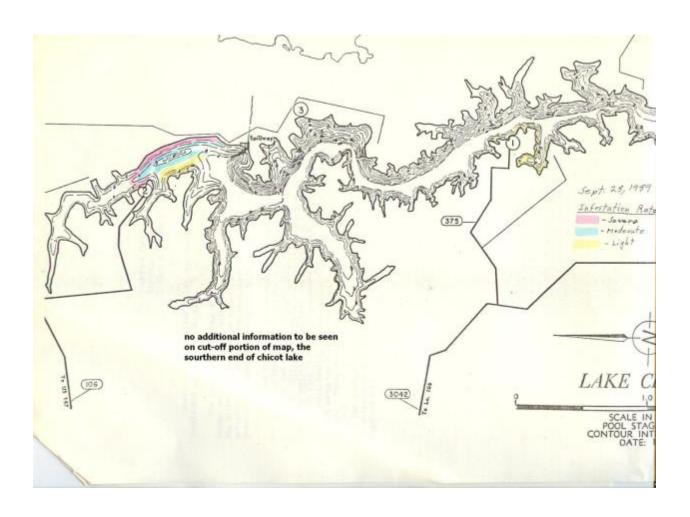
CHICOT LAKE September, 1989 Charles N. Dugas

Chicot Lake, Evangeline Parish, was surveyed for the presence of aquatic vegetation on September 28, 1989.

The lake was drawn down during 1986 and 1987. During this time, the lake became severely infested with willow trees (Salix nigra). In October of 1988, the willow infestation was treated with herbicide and a 90-95% control rate was achieved. The stems of the dead trees will probably take several years to completely disappear (from decay and boat traffic).

Submersed vegetation has appeared in several places around the lake. The most severely infested area was the north end near the dam. Fanwort (Cabomba caroliniana) and coontail (Ceratophyllum demersum) predominate, with some bladderwort (Utricularia sp.), pondweed (Potamogeton sp.), white water lily (Nymphaes odorata), and milfoil (Myriophyllum sp.) mixed in. This infestation was out to five (5) feet of water on either side of a dredged channel leading to the north landing. There were spotty light infestations of coontail and fanwort along the bank from the spillway down to just south of the south landing. There was no aquatic vegetation encountered in the rest of the lake.

The weather on the day of the survey was cloudy and drizzly. The water was slightly turbid. The lake was approximately six (6) inches below pool stage (46 MSL).



CHICOT LAKE

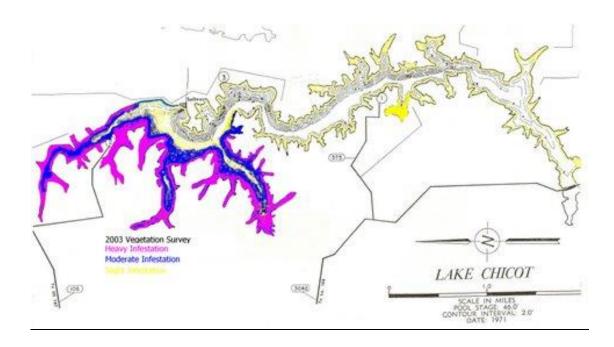
September 2003 O. Scott Schales

Chicot Lake, Evangeline Parish, was surveyed for the presence of aquatic vegetation on September 3, 2003. On the day of the survey the water was clear with secchi disk readings of 1.1-1.5 m. Water levels in the lake were at pool stage (46.0 MSL).

In an effort to eradicate the severe infestations of hydrilla (*Hydrilla verticillata*), an herbicide treatment of Sonar was applied May 15, 2003. The areas treated were Walker's Branch and from the spillway northward to the northern boat landing. Hydrilla in some portions of these areas has been depleted, although severe amounts are still present in other portions of the treated areas. Bleaching of the leaves on various plants was observed inside and adjacent to the treated areas, this is a positive sign that plants are still being affected by the herbicide treatment. Moderate to heavy amounts of filamentous algae were also present in these treated areas.

Hydrilla was the most dominant submersed vegetation in the northern section of the lake, and light amounts were observed in other areas of the lake. Coontail (*Ceratophyllum demersum*) and fanwort (*Cabomba caroliniana*) were found in light to moderate amounts throughout the lake. A nearly continuous fringe of coontail was present in the non-wooded sections of the southern half of the lake.

Other submersed plants observed during the survey were bladderwort (*Utricularia spp.*), variable leaf milfoil (*Myriophyllum heterophyllum*), and ottelia (*Ottelia alismoides*). Floating plants observed during the survey were water hyacinth (*Eichhornia crassipes*), duckweed (*Lemna minor*), common salvinia (*Salvinia minima*), frogbit (*Limnobium spongia*), and watermeal (*Wolffia spp.*). Moderate amounts of water hyacinth was present throughout the northern half of the lake with the most severe amounts located in Walker's Branch; duckweed was the most dominant plant located in the wooded areas in the southern part of the lake. Emersed plants observed during the survey were alligatorweed (*Alternanthera philoxeroides*), water primrose (*Ludwigia spp.*), American lotus (*Nelumbo lutea*), pennywort (*Hydrocotyle umbellate*), white water lily (*Nymphaea odorata*), smartweed (*Polygonum hydropiperoides*), duck potato (*Sagittaria spp.*), sedge (*Carex spp.*), giant cutgrass (*Zizaniopsis* miliacea), and pickerelweed (*Pontederia cordata*).



CHICOT LAKE

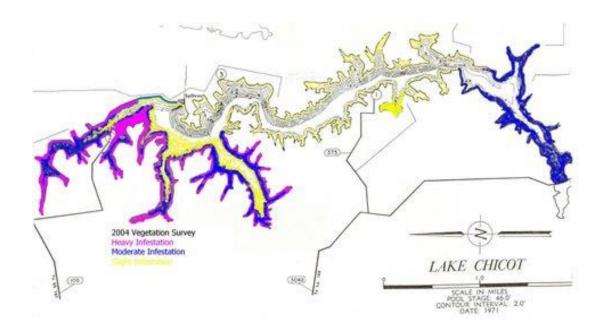
August 2004 O. Scott Schales

Chicot Lake, Evangeline Parish, was surveyed for the presence of aquatic vegetation on August 10, 2004. On the day of the survey the water was clear with secchi disk readings of 86-97 cm. Water levels in the lake were approximately 6" below pool stage (pool stage = 46.0' MSL).

In an ongoing effort to eradicate the hydrilla (*Hydrilla verticillata*) infestation, a herbicide treatment of Sonar was applied (July 29, 2004) for the second consecutive year. This application was delayed due to excessive rainfall throughout the spring and early summer. The areas treated were Walker's Branch and from the spillway northward to the northern boat landing. During the survey bleaching of the leaves on various plants in the treated areas was observed, this is a positive sign that the plants are being affected by the herbicide treatment.

Moderate to heavy amounts of hydrilla were observed from Walker's branch northward, and light amounts were observed in various locations in the southern part of the lake. Coontail (*Ceratophyllum demersum*) was observed in moderate amounts throughout the lake, and fanwort (*Cabomba caroliniana*) was observed in moderate amounts in the northern section of the lake. Light amounts of bladderwort (*Utricularia spp.*) were found in a few locations throughout the lake. Moderate amounts of filamentous algae were observed in one cove near the north boat landing.

Moderate amounts of water hyacinth (*Eichhornia crassipes*) and duckweed (*Lemna minor*) were observed throughout the lake, the heaviest amounts of duckweed were located in the wooded areas in the southern part of the lake. Other floating plants observed during the survey in light amounts were frogbit (*Limnobium spongia*) and watermeal (*Wolffia spp.*). Emergent plants observed during the survey in various parts of the lake were American lotus (*Nelumbo lutea*), white water lily (*Nymphaea odorata*), giant cutgrass (*Zizaniopsis miliacea*), alligatorweed (*Alternanthera philoxeroides*), water primrose (*Ludwigia spp.*), pennywort (*Hydrocotyle umbellate*), smartweed (*Polygonum hydropiperoides*), duck potato (*Sagittaria spp.*), and pickerelweed (*Pontederia cordata*).



Chicot Lake

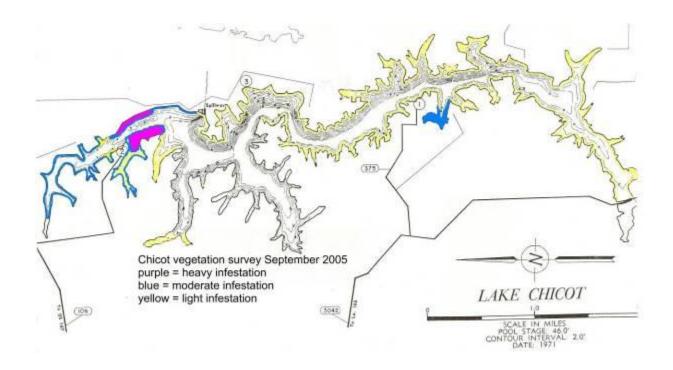
September 2005 Jody T. David

Chicot Lake, Evangeline parish, was surveyed for the presence of aquatic vegetation on September 14, 2005. On the day of the survey the water was clear with a secchi disk reading of 2 feet. Water levels in the lake were approximately 3 feet below pool stage (pool stage = 46.0' MSL).

In an ongoing effort to eradicate the hydrilla (*Hydrilla verticillata*) infestation, a herbicide treatment of Sonar was applied (April 26, 2005). The areas treated were Walker's Branch and from the spillway northward to the northern boat landing. During the survey bleaching of the leaves on various plants in the treated areas was observed, this is a positive sign that the plants are being affected by the herbicide treatment.

Light amounts of hydrilla amounts were observed in various locations in the southern part of the lake. Coontail (*Ceratophyllum demersum*) was observed in moderate amounts throughout the lake, and fanwort (*Cabomba caroliniana*) was observed in moderate amounts in the northern section of the lake. Light amounts of bladderwort (*Utricularia spp.*) were found in a few locations throughout the lake. Moderate amounts of filamentous algae were observed in one cove near the north boat landing.

Moderate amounts of water hyacinth (*Eichhornia crassipes*) and duckweed (*Lemna minor*) were observed throughout the lake, the heaviest amounts of duckweed were located in the wooded areas in the southern part of the lake. Other floating plants observed during the survey in light amounts were frogbit (*Limnobium spongia*) and watermeal (*Wolffia spp.*). Emergent plants observed during the survey were American lotus (*Nelumbo lutea*), white water lily (*Nymphaea odorata*) noticed on the north end of lake in severe amounts. Other emergents throughout the lake was giant cutgrass (*Zizaniopsis miliacea*), alligatorweed (*Alternanthera philoxeroides*), water primrose (*Ludwigia spp.*), pennywort (*Hydrocotyle umbellate*), smartweed (*Polygonum hydropiperoides*), duck potato (*Sagittaria spp.*), and pickerelweed (*Pontederia cordata*).



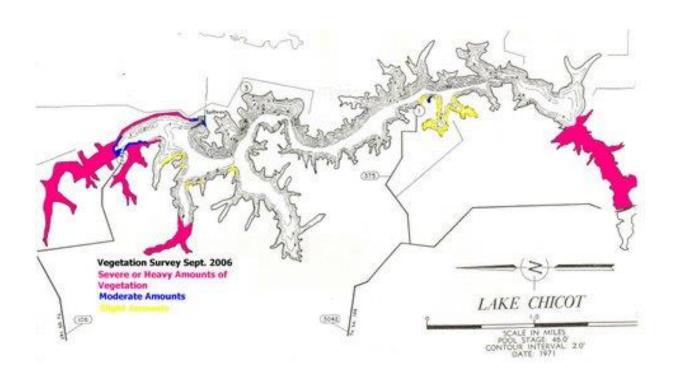
Chicot Lake September 2006 Jody T. David

Chicot Lake, Evangeline parish, was surveyed for the presence of aquatic vegetation on September 14, 2005. On the day of the survey the water was clear with a secchi disk reading of 2 feet. Water levels in the lake were approximately 1 foot below pool stage (pool stage = 46.0' MSL).

In an ongoing effort to eradicate the hydrilla (*Hydrilla verticillata*) infestation, a herbicide treatment of Sonar was applied (April 26, 2005). The areas treated were Walker's Branch and from the spillway northward to the northern boat landing. During the survey there was no sign of re-infestation of Hydrilla in these areas.

Light amounts of hydrilla amounts were observed in various locations in the southern part of the lake. Coontail (*Ceratophyllum demersum*) was observed in moderate amounts throughout the lake, and fanwort (*Cabomba caroliniana*) was observed in moderate amounts in the northern section of the lake. Light amounts of bladderwort (*Utricularia spp.*) were found in a few locations throughout the lake. Moderate amounts of filamentous algae were observed near the north boat landing.

Moderate amounts of water hyacinth (*Eichhornia crassipes*) and duckweed (*Lemna minor*) were observed throughout the lake, the heaviest amounts of duckweed were located in the wooded areas in the southern part of the lake. Other floating plants observed during the survey in light amounts were frogbit (*Limnobium spongia*) and watermeal (*Wolffia spp.*). Emergent plants observed during the survey were American lotus (*Nelumbo lutea*), white water lily (*Nymphaea odorata*) noticed on the north end of lake in severe amounts. Other emergents throughout the lake was giant cutgrass (*Zizaniopsis miliacea*), alligatorweed (*Alternanthera philoxeroides*), water primrose (*Ludwigia spp.*), pennywort (*Hydrocotyle umbellate*), smartweed (*Polygonum hydropiperoides*), duck potato (*Sagittaria spp.*), and pickerelweed (*Pontederia cordata*).



Chicot Lake

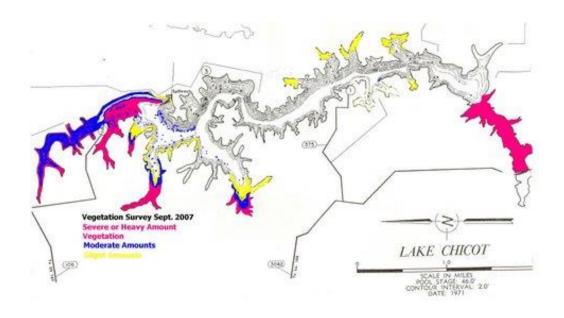
September 2007 Jody T. David

Chicot Lake, Evangeline parish, was surveyed for the presence of aquatic vegetation on September 5, 2007. On the day of the survey the water was clear with a secchi disk reading of 2 feet. Water levels in the lake were at pool stage (pool stage = 46.0' MSL).

Moderate to heavy amounts of hydrilla (*Hydrilla verticillata*) were observed on the northern part of the lake. Areas such as the Ski Lake, near the North Landing, Conservation lodge, Turtle Island and Walker Branch.

Light amounts of hydrilla were observed in various locations in the southern part of the lake. Coontail (*Ceratophyllum demersum*) was observed in moderate amounts throughout the lake, and fanwort (*Cabomba caroliniana*) was observed in moderate amounts in the northern section of the lake. Light amounts of bladderwort (*Utricularia spp.*) were found in a few locations throughout the lake. Moderate amounts of filamentous algae were observed near the north boat landing.

Moderate amounts of water hyacinth (*Eichhornia crassipes*) and duckweed (*Lemna minor*) were observed throughout the lake, the heaviest amounts of duckweed was located in the wooded areas in the southern part of the lake, behind the bridge in Walker Branch and back of Turtle Island. Other floating plants observed during the survey in light amounts were frogbit (*Limnobium spongia*) and watermeal (*Wolffia spp.*). Emergent plants observed during the survey were American lotus (*Nelumbo lutea*), white water lily (*Nymphaea odorata*) noticed on the north end of lake in severe amounts. Other emergents throughout the lake was giant cutgrass (*Zizaniopsis miliacea*), alligatorweed (*Alternanthera philoxeroides*), water primrose (*Ludwigia spp.*), pennywort (*Hydrocotyle umbellate*), smartweed (*Polygonum hydropiperoides*), duck potato (*Sagittaria spp.*), and pickerelweed (*Pontederia cordata*).



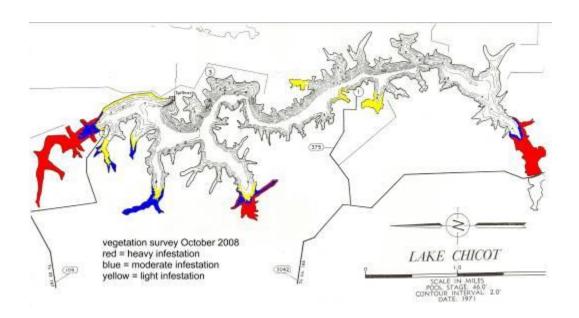
Chicot Lake October 2008 Jody T. David

Chicot Lake, in Evangeline parish, was surveyed for the presence of aquatic vegetation on October 15^{th} 2008. On the day of the survey the water was clear with a secchi disk reading of 2.5 feet. Water levels in the lake were at pool stage (pool stage = 46.0° MSL).

Due to a SONAR application in June 2008 very little hydrilla (*Hydrilla verticillata*) were observed on the northern part of the lake. Areas such as the Ski Lake, near the North Landing, Conservation lodge, Turtle Island and Walker Branch.

Light amounts of hydrilla were observed in various locations in the southern part of the lake along the shoreline. Coontail (*Ceratophyllum demersum*) was observed in light amounts throughout the lake, and fanwort (*Cabomba caroliniana*) was observed in light amounts in the northern section of the lake. Light amounts of bladderwort (*Utricularia spp.*) were found in a few locations throughout the lake.

Moderate amounts of water hyacinth (*Eichhornia crassipes*) and duckweed (*Lemna minor*) were observed throughout the lake, the heaviest amounts of duckweed was located in the wooded areas in the southern part of the lake, behind the bridge in Walker Branch and back of Turtle Island. Other floating plants observed during the survey in light amounts were frogbit (*Limnobium spongia*) and watermeal (*Wolffia spp.*). Emergent plants observed during the survey were American lotus (*Nelumbo lutea*), white water lily (*Nymphaea odorata*) noticed on the north end of lake in light amounts. Other emergents throughout the lake was giant cutgrass (*Zizaniopsis miliacea*), alligatorweed (*Alternanthera philoxeroides*), water primrose (*Ludwigia spp.*), pennywort (*Hydrocotyle umbellate*), smartweed (*Polygonum hydropiperoides*), duck potato (*Sagittaria spp.*), and pickerelweed (*Pontederia cordata*).



Chicot Lake

15th of September, 2009 Jody T. David

Chicot Lake, in Evangeline parish, was surveyed for the presence of aquatic vegetation on September 15th, 2009. Water level in the lake was at pool stage, 46.0' MSL.

Due to a SONAR application in June 2008, only moderate amounts of hydrilla (*Hydrilla verticillata*) were observed on the northern part of the lake adjacent to the north landing. Hydrilla amounts have increased in this area of the lake; however, the other treated areas such as conservation cove are still only slightly infected with hydrilla. A Sonar application is planned for many of the same areas of the lake in 2010. Amounts of hydrilla to be treated in 2010 should be less than what was treated in 2008. Hydrilla control and reduction is apparent. Resistance to the fluridone herbicide is not desired but eventually expected.

Light amounts of hydrilla were observed in fewer locations in the southern part of the lake along the shoreline than observed in 2008. Fanwort (*Cabomba caroliniana*), coontail (*Ceratophyllum demersum*), hydrilla, and bladderwort (*Utricularia spp.*) were observed in moderate to heavy amounts in the northern cove of the lake located to the east of the north landing. Light amounts of bladderwort (*Utricularia spp.*) and coontail were found in a few locations throughout the lake.

The heaviest amounts of duckweed (*lemma sp.*) were located in the wooded areas of the southern part of the lake, behind the bridge in Walker Branch, the conservation cove, and the back of Turtle Island in 2008. The Continual applications of diquat though out the lake onto duckweed have resulted in open water in these areas this year. Moderate amounts of duckweed were observed in several of the many coves of the southern end of the lake. Treatments subsequent to this report have been made with diquat onto these areas. The southern end of the lake near the southern walking bridge continues to be infested with heavy amounts of common salvinia (*S. minima*) despite multiple application of diquat. **No giant salvinia** (*S. molesta*) **observed in the lake.**

Other floating plants observed during the survey in light amounts were frogbit (*Limnobium spongia*), water hyacinth (*Eichhornia crassipes*), and watermeal (*Wolffia spp.*). Emergent plants observed during the survey were American lotus (*Nelumbo lutea*), white water lily (*Nymphaea odorata*) observed on the north end of lake in light amounts. Other emergents throughout the lake was giant cutgrass (*Zizaniopsis miliacea*), alligatorweed (*Alternanthera philoxeroides*), water primrose (*Ludwigia spp.*) found in large mats on the south end of the lake along with moderate amounts of pennywort (*Hydrocotyle umbellate*) Very light amounts of smartweed (*Polygonum hydropiperoides*), duck potato (*Sagittaria spp.*), and pickerelweed (*Pontederia cordata*) were observed mostly on southern end of the lake.

